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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA, WESTERN DIVISION

CH₂O, INC.,

Plaintiff,

v.

MERAS ENGINEERING, INC.;
HOUWELING'S NURSERIES
OXNARD, INC.; HNL HOLDINGS
LTD.; HOUWELING UTAH
OPERATIONS, INC.; and
HOUWELING'S NURSERIES LTD.,

Defendants.

Case No. CV-13-8418 JAK (GJSx)

**CH₂O, INC.'S OPPOSITION TO
DEFENDANTS' MOTION IN
LIMINE PRECLUDING CH₂O'S
RELIANCE ON THE DOCTRINE
OF EQUIVALENTS (D.I. 255)**

[REDACTED VERSION]

Date: May 16, 2016

Time: 3:00 PM

Courtroom: 750

Hon. John A. Kronstadt

1 **I. INTRODUCTION**

2 Defendants' motion *in limine* to preclude CH₂O's reliance on the doctrine of
3 equivalents mischaracterizes the prosecution history and ignores the "tangential
4 relation" and "foreseeability" exceptions to the *Festo* prosecution history estoppel
5 doctrine, as well as the opinion of CH₂O's technical expert that the doctrine should
6 not apply. By contrast, Defendants have no expert opinion on any of these issues, and
7 present only attorney argument.¹

8 The doctrine of equivalents may play an important role at trial because, in their
9 infringing systems, Defendants have apparently made a trivial substitution of
10 ammonium molybdate for sodium molybdate. Yet as Dr. Hermanowicz explains in
11 detail in his expert report, ammonium molybdate performs the same function in the
12 same way to achieve the same result as sodium molybdate, and it therefore infringes
13 under the doctrine of equivalents. Accordingly, granting Defendants' motion at this
14 stage would sanction Defendants' trivial change and permit them to continue
15 infringing. For these reasons, as set forth in greater detail below, CH₂O respectfully
16 requests that the Court not only deny Defendants' motion but also preclude
17 Defendants from presenting any testimony or argument at trial regarding prosecution
18 history estoppel.

19 **II. ARGUMENT**

20 **1. Legal Standards**

21 Prosecution history estoppel prevents a patentee from recapturing under the
22 doctrine of equivalents subject matter surrendered during prosecution to obtain a
23 patent." *Cross Med. Prods. v. Medtronic Sofamor Danek, Inc.*, 480 F.3d 1335, 1341
24

25 ¹ Defendants' "motion *in limine*" is instead an improper and untimely motion for
26 partial summary judgment as it raises an issue of law (the applicability of prosecution
27 history estoppel) and seeks to dispose of part of one of CH₂O's claims. It should be
28 denied on this basis alone. Moreover, as detailed herein, Defendants' argument is
incorrect as a matter of law, and completely unsupported by any evidence or opinion
testimony.

(Fed. Cir. 2007); *see Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 535 U.S. 722, 738 (2002). For amendment-based estoppel, where the applicant “narrowed the claim in response to a rejection, courts may presume the amended text was composed with awareness of this rule and that the territory surrendered is not an equivalent of the territory claimed.” *Deering Precision Instr., L.L.C. v. Vector Distrib. Sys., Inc.*, 347 F.3d 1314, 1325 (Fed. Cir. 2003). In order to rebut the presumption, “the patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.” *Id.* (internal quotation marks omitted). The patentee may do so by showing that (1) “the equivalent may have been unforeseeable at the time of the amendment;” (2) “the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question;” or (3) “there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question.” *Id.*

2. Defendants Misrepresent the Prosecution History of the ’470 Patent

During prosecution of the ’470 patent, the applicants made several amendments to the claims in order to overcome rejections. On December 10, 2003, the applicants combined several dependent claims into the existing independent claim. [Ex. 35 (CH2O_00039-40).] Specifically, they added the limitations from original dependent claims 9 and 16, which were directed to the inertness and antiscalant properties of the second component of the mixture, to the independent claim. [*Id.*] They also added the limitation of using sodium molybdate as a catalyst. [*Id.*]

In their remarks explaining the amendments, the applicants stated:

The second solution is acidic to convert the sodium chlorite into chlorine dioxide but it remains unaffected in the reacted mixture. As a result, the second solution functions as a mineral antiscalant in the water system.

Claim 25 also specifies the use of sodium molybdate as a catalyst to enhance conversion of the sodium chlorite into

1 chlorine dioxide. *These just discussed features* are not
2 disclosed by either Christensen et al or Schroeder et al.
3 Accordingly, without these teaching in the prior art, there is
4 an insufficient factual basis for a rejection under 35 USC §
103(a).

5 [*Id.* (emphasis added).] In other words, they identified a number of features they had
6 added to the claims, only one of which was sodium molybdate. Defendants argue in
7 their motion that “[t]he Examiner allowed new claim 25 over the references because
8 [*sic*] arguments relating to the addition of the recitation of using ‘sodium molybdate’
9 as a catalyst.” [Mot. at 7.] However, as is clear from the actual arguments above, the
10 applicants provided several reasons why the newly-amended claim was patentable,
11 only one of which involved the addition of molybdate.

12 **3. The “Tangential Relation” Exception to the *Festo* Doctrine Applies**
13 **Here**

14 The Federal Circuit has interpreted “no more than a tangential relation” to mean
15 “peripheral, or not directly relevant, to the alleged equivalent.” *Festo Corp v Shoketsu*
16 *Kinzoku Kogyo Kabushiki*, 344 F.3d 1359, 1369. “[T]he inquiry into whether a
17 patentee can rebut the *Festo* presumption under the ‘tangential’ criterion focuses on
18 the patentee’s objectively apparent reason for the narrowing amendment.” *Id.* Thus,
19 “whether an amendment was merely tangential to an alleged equivalent necessarily
20 requires focus on the context in which the amendment was made; hence the resort to
21 the prosecution history.” *Id.* at 1370.

22 In *Regents of University of Cal. v. Dakocytomation Cal., Inc.*, 517 F.3d 1364,
23 1378 (Fed. Cir. 2008) (“*Dako*”), the Federal Circuit reversed the district court’s
24 application of prosecution history estoppel to bar the patentee from asserting the
25 doctrine of equivalents despite the fact that “the patentees did amend the claim in
26 order to distinguish the invention over the prior art.” The patentee claimed a “blocking
27 nucleic acid,” while the accused product employed a “peptic nucleic acid,” which was

1 not literally the same thing. *Id.* at 1376. The applicants had amended their claims to
2 add the “blocking nucleic acid” to overcome a rejection in light of three references.
3 *Id.* at 1378. Those three references either did not disclose any kind of “blocking” or
4 any method of “detection of unique sequences.” *Id.*

5 The Federal Circuit found that “[t]he prosecution history therefore reveals that
6 in narrowing the claim to overcome the prior art rejections, the focus of the patentees’
7 arguments centered on the method of blocking—not on the particular type of nucleic
8 acid that could be used for blocking.” *Id.* In addition, “none of the cited references
9 concerned the type of nucleic acid that could perform the blocking, or mentioned the
10 accused equivalent.” *Id.* The court held that “appellants have met their burden of
11 showing that the amendment did not surrender the equivalent in question because the
12 narrowing amendment was only tangential to the accused PNA equivalent, *i.e.*, the
13 peptide nucleic acid.” *Id.*; *see also Primos, Inc. v. Hunter’s Specialties, Inc.*, 451 F.3d
14 841, 848-850 (Fed. Cir. 2006) (affirming district court finding that prosecution history
15 estoppel did not bar application of doctrine of equivalents because amendments to
16 claimed “plate” limitation were “merely tangential to the contested element in the
17 accused device,” *i.e.*, a dome, since both the accused equivalent and the amended
18 claim language encompassed a common “differentially spaced” layout).

19 Other district courts, citing *Dako*, have reached similar conclusions. In *Alfred*
20 *E. Mann Foundation for Scientific Research v. Cochlear Corporation*, CV 07-8108
21 FMO (SHx), 96 F. Supp. 3d 1028 (C.D. Cal. 2015), a case involving cochlear implant
22 technology, the accused infringer argued that during prosecution the patentee
23 narrowed a claim of the patent-in-suit by adding a “displaying” limitation in order to
24 overcome prior art. *Id.* at 1044. The patentee responded that the amendment focused
25 on “the displaying *capability* of the invention, not on any particular *type* of
26 information that must be displayed.” *Id.* (emphasis added). Judge Olguin held that
27 “the Applicants’ addition of the ‘displaying’ limitation to claim 10 was directed
28

1 towards overcoming the pacemaker prior art that lacked a display...not on the
2 particular type of information that must be displayed.” *Id.* at 1045. The court further
3 held that “the ‘objectively apparent reason’ for the amendment was to overcome the
4 pacemaker prior art, which did not include the real-time display of data.” *Id.* In
5 addition, the accused infringer argued that estoppel should apply because of the
6 Examiner’s statement that “the prior art does not show or suggest the measuring of
7 the electrode voltage for external display.” *Id.* at 1046. However, Judge Olguin held
8 that “[t]he Examiner’s Notice of Allowance cannot, by itself, give rise to disavowal
9 of claim scope.” *Id.* (citing *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1347
10 (Fed. Cir. 2005)). Furthermore, the court held the examiner’s statement pertained to
11 the external display, not “requiring the display of a voltage value.” *Id.*; *see also*
12 *American Patent Development Corp., LLC v. Movielink, LLC*, 637 F. Supp. 2d 224,
13 233 (D. Del. 2009) (finding presumption of prosecution history estoppel rebutted
14 when “the patentee’s response to the examiner was, in fact, focused on how and where
15 the limiting data is transmitted, not on its actual content” and that any “statements that
16 touch on the actual content of the limiting data...were largely incidental to the core
17 issue of how the data is transmitted”); *Cerner Corp. v. Visicu, Inc.*, 667 F. Supp. 2d
18 1062, 1073-74 (W.D. Mo. 2009) (finding applicants overcame presumption of
19 prosecution history estoppel because in amending the claim, the applicants were “not
20 distinguishing prior art on the grounds that it disclosed a database physically housed
21 outside the remote command center, but rather that the invention was computer-driven
22 instead of human-based” and “the narrowing amendment was peripheral, or not
23 directly related, to the alleged equivalent.”); *see also Intervet Inc. v. Merial Ltd.*, 617
24 F.3d 1282 (Fed. Cir. 2010) (finding certain amendments tangential); *Funai Elec. Co.,*
25 *Ltd. v. Daewoo Electronics Corp.*, 616 F.3d 1357 (Fed. Cir. 2010) (holding
26 cancellation of claims tangential).

1 Here, as in *Dako* and its progeny, the amendment by which the CH₂O applicants
2 added “using sodium molybdate as a catalyst” was merely tangential to the equivalent
3 because it was only one element in a larger amendment and because none of the prior
4 art used any kind of molybdate as a catalyst to convert sodium chlorite into chlorine
5 dioxide.

6 First, as in *Dako* and its progeny, none of the references cited by the examiner
7 in the prior art—Christenson, Vaska, Ringo, Schroeder, or Turcotte—discloses using
8 molybdate as a catalyst. [See Ex. 12 (Bubnis Dep. Tr.) at 7:24-8:6 (Defendants’ expert
9 conceding that no reference, including the aforementioned discloses using molybdate
10 as a catalyst).] Put differently, no reference describes using molybdate *in general* such
11 that CH₂O had to claim using *sodium* molybdate as a catalyst in order to obtain
12 allowance of its claims. The novelty of the CH₂O applicants’ amendment lay in using
13 *any* sort of molybdate as a catalyst, not in specifically using *sodium* molybdate, much
14 as the novelty of the *Dako* applicants’ amendment lay centered on the method of
15 blocking, not on the particular type of nucleic acid that could be used for blocking.
16 Dr. Hermanowicz provided further support for this argument in his expert report:

17 I have reviewed the Christensen and Schroeder references
18 and determined that neither discloses catalyzing a reaction
19 to enhance production of chlorine dioxide, let alone the
20 claimed step of “using sodium molybdate as a catalyst to
21 enhance conversion of sodium chlorite into chlorine
22 dioxide.” Christensen mentions sodium molybdate as a
23 corrosion inhibitor [U.S. Patent No. 5,424,032 at 4:53-61],
24 but does not indicate that molybdate of any type would be
25 used to catalyze a reaction, much less to enhance
26 conversion of sodium chlorite into chlorine dioxide like
27 that claimed. Schroeder mentions neither molybdate nor
28 catalysis for the production of chlorine dioxide.

[Ex. 2 (Hermanowicz Infr. Rpt.) at ¶ 220.] Dr. Hermanowicz further explained how
the use of molybdate in general, not necessarily *sodium* molybdate, catalyzes the

1 chlorine dioxide reaction, since “[i]f any other molybdate salt were to be used (such
2 as potassium molybdate or ammonium molybdate) as the catalyst, it would still
3 dissociate into molybdate ions with corresponding counter-ions.” [*Id.* at ¶ 221.]

4 Second, in response to the examiner’s rejection, the applicants consolidated a
5 number of dependent claims into the single independent claim that ultimately issued.
6 Thus, in addition to the sodium molybdate limitation, the applicants added several
7 other limitations, including original dependent claims 9 and 16, which were directed
8 to the inertness and antiscalant properties of the second component of the mixture. As
9 Dr. Hermanowicz observes, “[t]he recitation of sodium in the step of ‘using sodium
10 molybdate as a catalyst’ was not required to overcome the cited prior art. In fact, the
11 applicants cited several features to distinguish the prior art:”

12 *The second solution is acidic to convert the sodium*
13 *chlorite into chlorine dioxide but it remains unaffected in*
14 *the reacted mixture. As a result, the second solution*
15 *functions as a mineral antiscalant in the water system.*
16 Claim 25 also specifies the use of sodium molybdate as a
17 catalyst to enhance conversion of the sodium chlorite into
18 chlorine dioxide. *These just discussed features* are not
19 disclosed by either Christensen et al or Schroeder et al.
Accordingly, without these teaching in the prior art, there is
an insufficient factual basis for a rejection under 35 USC §
103(a).

20 [Ex. 2 (Hermanowicz Infr. Rpt.) at ¶ 221 (citing CH2O_000040) (emphasis added).]
21 Thus, at best, the amendment that resulted in allowance pertained only in part to the
22 sodium molybdate feature of the invention.

23 Third, elsewhere in the file history, the examiner recognized that using sodium
24 molybdate to inhibit corrosion in a water system was known in the art and that, in
25 addition, it would have been obvious to use sodium molybdate as a catalyst in such a
26 system. [Ex. 35 (CH2O_00076 (Paragraph 11 of Office Action)) (“Christensen et al.
27 disclose...that it is known in the art of water treatment to utilize sodium
28

1 molybdate...to aid in inhibiting corrosion in a process water system. It would have
2 been obvious to one skilled in the art to modify the method of Schroeder et al. by
3 including sodium molybdate in the second solution or catalyst”)).] Thus, it cannot be
4 the case that CH₂O obtained allowance by amending the claims to recite using sodium
5 molybdate explicitly as the catalyst because the examiner already considered it
6 obvious.

7 **4. The “Foreseeability” Exception to the *Festo* Doctrine Applies Here**

8 In addition, under *Festo*’s “foreseeability” prong, “after-arising” equivalents or
9 “later developed technology” are not considered foreseeable equivalents and therefore
10 fall within the scope of the claims. *Festo IX*, 344 F.3d at 1369. The classic cases of
11 after-arising equivalents, according to the Federal Circuit, are “transistors in relation
12 to vacuum tubes, or Velcro® in relation to fasteners.” *Id.* Courts typically consider
13 expert testimony and other extrinsic evidence pertaining to the underlying factual
14 inquiry of foreseeability. *Id.*

15 Here, ammonium molybdate was not a foreseeable equivalent at the time the
16 patent was filed because no one in the agricultural field had heard of it, let alone used
17 it, until 2015. [REDACTED]

18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED] Given that none of the key industry leaders involved in this case had
9 even heard of ammonium molybdate in 2015, it is reasonable to assume that it was
10 not foreseeable 15 years earlier, when the patent was filed. As such, the use of
11 ammonium molybdate for catalysis purposes is an after-arising equivalent, an
12 exception to prosecution history estoppel.

13 **5. Defendants' Experts Have Presented No Testimony about**
14 **Prosecution History Estoppel, and Defendants Should Therefore Be**
15 **Precluded from Presenting any Testimony or Argument Regarding**
16 **the Issue at Trial**

17 Finally, neither Meras nor Houweling's has advanced any type of prosecution
18 history estoppel defense, not in their Answers, nor in their discovery responses, nor
19 in their technical expert's reports. In addition, Defendants' expert report does not
20 present any discussion whatsoever rebutting CH₂O's doctrine of equivalents
21 argument regarding ammonium molybdate, or, for that matter, any discussion at all
22 regarding equivalents, full stop. [Ex. 12 (Bubnis Dep. Tr.) at 271:23-273:7]
23 Defendants' sole reference to ammonium molybdate in their discovery responses are
24 the following three sentences responding to CH₂O's Interrogatory No. 4:

24 [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]

[Ex. 38 (Houweling's Resp. to Interrog. No. 4) at 8.]

CH₂O repeatedly asked Defendants to supplement their response, but Defendants declined, saying instead that their expert reports would cover all of their noninfringement positions. [Ex. 39 (2/2/2016 Email thread btw. Rosen and Golden-Heybl) at 1.] The only other mention Defendants have made of prosecution history estoppel was the following single sentence in an August email regarding Houweling's switch from sodium molybdate to ammonium molybdate: "As you are surely aware, CH₂O is precluded by prosecution history estoppel from claiming equivalents to sodium molybdate." [Ex. 40 (8/20/15 Email to Marchese fr Heybl).] Defendants never elaborated on this statement or provided any discovery of any kind about it. Accordingly, Defendants have waived any right to present at trial a doctrine of equivalents defense, a prosecution history estoppel defense, or a prosecution history estoppel defense premised on sodium molybdate as an equivalent, and they should be precluded from doing so.

III. CONCLUSION

For all the reasons set forth above, CH₂O respectfully requests that the Court not only deny Defendants' motion but also preclude Defendants from presenting any testimony or argument at trial regarding prosecution history estoppel.

Dated: May 9, 2016

FISH & RICHARDSON P.C.

By: /s/ Christopher S. Marchese
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CH₂O'S OPPOSITION TO DEFENDANTS' MOTION *IN LIMINE* PRECLUDING CH₂O'S
RELIANCE ON THE DOCTRINE OF EQUIVALENTS

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on May 9, 2016 to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system. Any other counsel of record will be served by electronic mail and regular mail.

/s/ Christopher S. Marchese
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